

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

**RECEIVED**

MAR 5 2001

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**In the Matter of**

## Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended

)  
)  
) **WT Docket No. 99-87**

## Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies

1) RM-9332

# Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz

1) RM-9405

## Petition for Rule Making of the American Mobile Telecommunications Association

1) RM-9705

**Comments of the Industrial Telecommunications Association, Inc.**

The Industrial Telecommunications Association, Inc. (ITA) hereby respectfully submits its comments in response to the Federal Communications Commission's *Further Notice of Proposed Rule Making* (BBA-97 NPRM) in the above-referenced matter,<sup>1</sup> which seeks comment on two issues with respect to private land mobile licensees. First, the BBA-97 NPRM seeks comment on the American Mobile Telecommunications Association's (AMTA) proposal for a mandatory migration to spectrally efficient equipment for Private Mobile Radio Service (PMRS)

*See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz; Petition for Rule Making of the American Mobile Telecommunications Association (AMTA), WT Docket No. 99-87, FCC 00-403, Report and Order and Further Notice of Proposed Rule Making (rel. Nov. 20, 2000) (BBA-97 NPRM).*

No. of Copies rec'd 014  
 12 ABCDE

licensees.<sup>2</sup> As discussed herein, ITA supports a transition to 12.5 kHz narrowband equipment and urges the Commission to adopt efficiency requirements for both licensees and equipment manufacturers. ITA believes any mandated transition to 6.25 kHz is premature. Second, the BBA-97 NPRM seeks comment on whether the Commission should permit 900 MHz Business Industrial/Land Transportation (BI/LT) licensees to convert their licenses to commercial use, as it has with respect to 800 MHz licensees. ITA believes that service offerings at 800 MHz and 900 MHz are sufficiently different, however; accordingly, the Commission should implement flexibility at 800 MHz and monitor marketplace developments before implementing similar flexibility at 900 MHz.

#### **I. Statement of Interest**

ITA is a Commission-certified frequency advisory committee coordinating in excess of 6,000 applications per year on behalf of applicants seeking Commission authority to operate BI/LT radio stations on frequency assignments allocated between 30-900 MHz.

ITA enjoys the support of a membership including more than 3,500 licensed two-way land mobile radio communications users, PMRS-oriented radio dealer organizations, and the following trade associations:

- Alliance of Motion Picture and Television Producers
- Aeronautical Radio, Inc.
- Associated Builders & Contractors, Inc.
- Florida Citrus Processors Association
- Florida Fruit & Vegetable Association
- National Mining Congress
- National Propane Gas Association
- National Ready-Mixed Concrete Association

---

<sup>2</sup> See American Mobile Telecommunications Association (AMTA), Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, *Petition for Rulemaking*, RM-9332 (filed June 19, 1998) (AMTA Petition).

National Utility Contractors Association  
New England Fuel Institute  
United States Telephone Association

In addition, ITA is affiliated with the following independent market councils: the Council of Independent Communication Suppliers, the Taxicab & Livery Communications Council, the Telephone Maintenance Frequency Advisory Committee, and USMSS, Inc.

## **II. Background**

On March 25, 1999, the Commission released a *Notice of Proposed Rule Making* seeking comment on its revised and expanded auction authority for wireless telecommunications services under Sections 309(j) and 337 of the Communications Act of 1934, as amended by the Balanced Budget Act of 1997 (BBA).<sup>3</sup> ITA jointly filed comments<sup>4</sup> and reply comments<sup>5</sup> with the Council of Independent Communications Suppliers (CICS), the Taxicab and Livery Communications Council (TLCC) and the Telephone Maintenance Frequency Advisory Committee (TELFAC) on August 2, 1999 and September 30, 1999, respectively. On November 20, 2000, the Commission released a *Report and Order and Further Notice of Proposed Rule Making* in this proceeding,

---

<sup>3</sup> See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz, WT Docket No. 99-87, *Notice of Proposed Rule Making* (rel. Mar. 25, 1999).

<sup>4</sup> See Joint Comments of the Industrial Telecommunications Association, Inc. (ITA), the Taxicab & Livery Communications Council (TLCC) and the Telephone Maintenance Frequency Advisory Committee (TELFAC), Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz, WT Docket No. 99-87 (filed Aug. 2, 1999).

<sup>5</sup> See Joint Reply Comments of ITA, TLCC and TELFAC, Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz, WT Docket No. 99-87 (filed Sept. 30, 1999).

ruling on its expanded auction authority and seeking comment on the two private land mobile issues that are the subject of these comments.

### **III. Mandatory Migration to Spectrally Efficient Equipment**

In the BBA-97 NPRM, the Commission seeks comments on two approaches for mandating a transition to narrowband technology for certain Part 90 licensees.<sup>6</sup> The first proposal, suggested by AMTA, establishes a timeframe by which licensees must employ spectrally efficient technology.<sup>7</sup> The second proposal prohibits the manufacture or importation of non-spectrally efficient equipment.<sup>8</sup> ITA supports the Commission's efforts to mandate the use of more efficient equipment. Indeed, ITA believes that the Commission should require *both* licensees and equipment manufacturers to satisfy efficiency standards of one voice or 9.6 kbps data per 12.5 kHz in order to ensure the effective and timely transition to narrowband technology.

#### **A. AMTA's Proposal To Mandate Licensees' Deployment of Efficient Technology**

AMTA's proposal phases in narrowband technology through licensee compliance with mandated deadlines for deployment of new spectrum-efficient technologies. The new technology would be phased in from 2003 to 2020, beginning with the most urban markets. Licensees operating in the most congested areas (urban area markets 1-50)<sup>9</sup> would be required to adopt spectrally efficient technology by December 31, 2003. Licensees operating in markets 51-100 would be required to adopt spectrally efficient technology by December 31, 2008, and licensees operating in the remaining markets would be required to adopt such technology by December 31,

---

<sup>6</sup> The proposed mandatory migration would apply to non-Public Safety licensees in the bands between 222 MHz and 896 MHz.

<sup>7</sup> BBA-97 NPRM at ¶¶ 137-141; *see also* AMTA Petition at 6-8.

<sup>8</sup> BBA-97 NPRM at ¶ 142.

<sup>9</sup> *See* 47 C.F.R. § 90.741 (setting forth the urban area market rankings used in AMTA's proposal).

2020. According to the proposal submitted by AMTA, licensees failing to deploy narrowband technology on schedule would be required to accept secondary status.<sup>10</sup>

ITA agrees with AMTA that licensees operating in urban areas (markets 1-50) should be required to transition to 12.5 or equivalent efficiency narrowband technology by December 31, 2003.<sup>11</sup> These geographic areas have the most immediate need for narrowband technology and, accordingly, a swift transition period is appropriate. Mandating spectrally efficient technology by 2003 will open new channels for operation and increase spectrum capacity within a short timeframe. While this deadline imposes some time constraints on licensees, the increased capacity will provide much-needed relief for traffic on shared spectrum in heavily saturated markets; moreover, the industry is quite capable of meeting this deadline. After polling its membership, ITA believes that many PMRS licensees and providers are fully aware of the potential for a rapid transition to narrowband equipment, and many industry members would like such a transition to occur as soon as possible.

While ITA supports the proposed deadline of December 31, 2003 for urban-area licensees, ITA does not support AMTA's proposed timeframe of December 31, 2008 or December 31, 2020 for licensees in less congested markets. Such a lengthy transition period would provide licensees with an unnecessarily protracted amount of time to adopt narrowband technology. Licensees should not be permitted to wait until 2008 or as late as 2020 to deploy more efficient technology. Permitting such a delayed transition in rural areas would perpetuate and even promote an unnecessary disparity in the efficiency of technology deployed by land

---

<sup>10</sup> See AMTA Petition at 6-7.

<sup>11</sup> This would include systems with at least one voice path per 12.5 kHz or equivalent and data systems with a data rate of at least 9600 bps per 12.5 kHz, or equivalent.

mobile licensees. As the Commission noted, “a user that continues to employ spectrally inefficient equipment, when more efficient alternatives are available, is harming other users with whom it is sharing the frequencies in these bands.”<sup>12</sup> Moreover, the entire industry would benefit from an increase in the amount of private land mobile channels available for use.

ITA proposes that licensees in non-urban areas (markets 51 and higher) should be required to implement 12.5 kHz or equivalent efficiency narrowband technology by December 31, 2005. This deadline would take into account both the needs of current licensees, as well as the feasibility of implementing narrowband technology in a timely manner. By adopting this deadline, licensees in more rural areas would have sufficient latitude to implement new technology over an extended period of time, without unnecessarily delaying the uniform and complete migration to narrowband technology among the private land mobile community.

**B. Proposal To Prohibit Manufacture or Importation of Inefficient Technology**

As an alternative to AMTA’s proposal, the Commission seeks comment on migration to spectrally efficient technology by “prohibit[ing] the manufacture or importation of equipment that does not meet certain efficiency standards by January 1, 2005.”<sup>13</sup> Unlike AMTA’s proposal, this approach focuses upon compliance with certain efficiency standards by equipment manufacturers and providers rather than licensees. The Commission has tentatively concluded that it will adopt this manufacturing-based approach to “encourage the migration to narrowband technology.”<sup>14</sup> ITA agrees that the Commission should prohibit the manufacture of inefficient equipment by a specific date; however, such a requirement will be ineffective unless the

---

<sup>12</sup> BBA-97 NPRM at ¶ 142.

<sup>13</sup> See BBA-97 NPRM at ¶ 142.

<sup>14</sup> *Id.*

Commission also requires licensees to transition to spectrally efficient technology. Absent licensee cooperation, equipment manufacturers cannot effectively implement a timely migration to narrowband technology. Mandating the manufacturing or importation of spectrally efficient technology does not actually mandate the *deployment* of such technology.

Adoption of a manufacturing-based approach, without any concomitant licensee requirements, will permit market forces to determine when users will deploy spectrally efficient technology; ITA believes, however, that market-based forces have proven inadequate. The Commission's current type-certification requirements illustrate the ineffectiveness of equipment-based requirements and market forces in implementing new technology. On February 14, 1997, the Commission adopted rules to facilitate a market-oriented transition to narrowband technology by allowing certification of wideband equipment for VHF and UHF transmitters only if the transmitter is capable of operating on narrowband channels.<sup>15</sup> Notwithstanding this requirement, however, the Commission is "inclined to agree . . . that the current pace of migration to more spectrally efficient technology is not rapid enough."<sup>16</sup> Using this historical knowledge, the Commission should adopt regulations that hold private wireless licensees accountable for the efficiency of their systems—not just equipment manufacturers.

ITA urges the Commission to prohibit the manufacture or importation of equipment which does not have the capability of at least one voice path per 12.5 kHz, or a data rate of 9600 bps in 12.5 kHz, or equivalent, effective six months after publication in the Federal Register. Although the Commission ultimately envisions a transition to equipment operating on 6.25 kHz

---

<sup>15</sup> *Id.* at ¶ 138; *see also* 47 C.F.R. § 90.203(j).

<sup>16</sup> BBA-97 NPRM at ¶ 141.

channel bandwidths in frequencies for private land mobile radio service,<sup>17</sup> the Commission should refrain from issuing a deadline for migration to 6.25 kHz equipment at this time. The Commission should first implement a transition to 12.5 kHz equipment, providing time for manufacturers to research and develop 6.25 kHz technology and for the Commission and private land mobile community to gather information and make an informed decision with respect to 6.25 kHz equipment.

### **C. Full Implementation of the LMCC Low Power Plan at 450-470 MHz**

ITA also recommends that the Commission expeditiously implement the full breadth of recommendations submitted by the Land Mobile Communications Council in 1997 regarding the low power frequencies in the 450-470 MHz. The LMCC recommendation was based on market requirements that exist for additional full power channels, some low power coordinated channels with base stations and some low power uncoordinated mobile-only channels. Continued uncertainty and delays in modifying the rules to implement the full LMCC low power transition recommendation hampers the private wireless community's attempts to deploy more efficient equipment in the 450-470 MHz band.

### **D. Efficiency of Data Systems**

An additional spectrum-efficient solution increasingly being deployed by private wireless users is a data system. Where data applications meet a user's operational requirements, data systems can generally accommodate significantly more users on a channel than a conventional voice system. ITA suggests that the Commission examine whether data-only systems in the bands below 512 MHz should be permitted to obtain a protected service area, similar to the rules

---

<sup>17</sup> See 47 C.F.R. § 90.203(j)(4).



already in place for trunked systems.

#### **E. Narrowband Emission Designators for Renewal**

As a final matter, in order to facilitate the narrowband conversion for the entire industry, the Commission should require PMRS licensees to include narrowband emission designators in their applications for renewal; PMRS licensees who fail to do so should accept secondary status with respect to their surrounding narrowband-compliant operators. By the same token, a licensee that obtains a renewed license but fails to operate within these technical parameters should be required to accept secondary status.

### **IV. 900 MHz Flexibility**

In addition to seeking comment on proposed requirements for spectrally efficient technology, the Commission also seeks comment on its proposal to permit 900 MHz licensees to convert their licenses to commercial mobile radio service (CMRS) use or otherwise assign or transfer their spectrum CMRS providers.<sup>18</sup> The Commission suggests that this proposal would mirror the Commission's decision to permit 800 MHz licensees the ability to convert their licenses for commercial use,<sup>19</sup> thereby "promot[ing] . . . the statutory objective of regulatory symmetry among CMRS providers."<sup>20</sup> The Commission also recognizes the "unique characteristics of the 800 MHz PLMR bands, however," and therefore seeks comment as to whether they "should continue to treat the 800 MHz and 900 MHz bands differently."<sup>21</sup> ITA

---

<sup>18</sup> BBA-97 NPRM at ¶ 143-144.

<sup>19</sup> *Id.* at ¶ 108-119.

<sup>20</sup> *Id.* at ¶ 144.

<sup>21</sup> *Id.*

submits that the 800 MHz and 900 MHz bands do not present analogous environments; accordingly, extending flexibility to 900 MHz licensees would be premature at this time.

Pursuant to the Commission's newly-amended rules, 800 MHz BI/LT licensees may provide commercial service, as well as assign or transfer their licenses to CMRS operators for commercial use, subject to the following restrictions: (1) licensees may not convert or assign the license until five years after the original grant; and (2) once a licensee has converted or assigned a BI/LT license for commercial use, they will be prohibited from obtaining a new BI/LT 800 MHz license in the same geographic area for one year.<sup>22</sup> Should flexibility be extended to 900 MHz licensees, the Commission intends to impose a holding period for 900 MHz spectrum, much like the new 800 MHz restrictions outlined above.<sup>23</sup>

ITA urges the Commission to monitor the implementation of flexibility for 800 MHz licensees prior to amending its rules with respect to 900 MHz licensees. ITA believes that the 800 MHz and 900 MHz wireless environments differ significantly in terms of services provided, and that a decision to mandate flexibility in the 800 MHz band should not necessarily apply to the 900 MHz band. For example, traditional SMR technology development has long been co-mingled with private wireless licensees at 800 MHz; in contrast, substantial commercial use does not exist on private land mobile channels at 900 MHz. In response to a recent poll of the ITA membership on this issue, one of our members illustrated the kind of service and benefits provided by non-commercial 900 MHz channels:

---

<sup>22</sup> *Id.* at ¶ 114-116; *see also* 47 C.F.R. § 90.621(e)(2). The five-year holding requirement does not apply to licenses that have been granted, or for which an application has been filed, as of November 9, 2000. *BBA-97 NPRM* at ¶ 116; *see also* 47 C.F.R. § 90.621(e)(2)(ii).

<sup>23</sup> *BBA-97 NPRM* at ¶ 144.

900 MHz PMRS channels coordinated a safe evacuation and medical response in our building during the 1995 Oklahoma City bombing while CMRS channels were being brutalized. We would in no way be interested in turning over our building's security and maintenance communications at 900 MHz to commercial providers.

ITA believes that the Commission cannot make an informed decision with respect to the 900 MHz band until the number of 800 MHz BI/LT licensees interested in assigning or transferring spectrum to CMRS providers becomes apparent. Accordingly, the Commission should propose flexible use requirements for 900 MHz only upon consideration of the developments at 800 MHz.


## **V. Conclusion**

ITA fully supports Commission efforts to facilitate the migration to narrowband equipment in PMRS spectrum. As discussed above, in order to ensure an effective and timely transition to spectrally efficient technology, the Commission should impose requirements for 12.5 kHz or equivalent efficiency upon both licensees and equipment manufacturers. Moreover, the Commission should mandate narrowband emission designators for licensees at renewal. ITA believes that it is premature, however, for the Commission to require a transition to 6.25 kHz equipment or to relax use restrictions applicable to 900 MHz BI/LT licensees. The Commission

should monitor the developments at 800 MHz before extending similar flexibility to a vastly different environment at 900 MHz.

Respectfully submitted,

INDUSTRIAL TELECOMMUNICATIONS  
ASSOCIATION, INC.  
1110 North Glebe Road, Suite 500  
Arlington, Virginia 22201  
703-528-5115

By: 

Laura L. Smith  
President and CEO



Jeremy W. Denton  
Director, Government Affairs

Date: March 5, 2001

## **CERTIFICATE OF SERVICE**

I, Jeremy W. Denton, do hereby certify that on the 5th day of March 2001, I forwarded to the parties listed below a copy of the foregoing Comments of the Industrial Telecommunications Association via hand delivery:

Peter A. Tenhula, Esq.  
Senior Legal Advisor  
Office of Chairman Michael K. Powell  
445 12th Street, S.W., 8-B201  
Washington, DC 20554

Mark Schneider, Esq.  
Senior Legal Advisor  
Office of Commissioner Ness  
445 12th Street, S.W., 8-B115  
Washington, DC 20554

Bryan Tramont, Esq.  
Legal Advisor  
Office of Commissioner Furchtgott-Roth  
445 12th Street, S.W., 8-A302  
Washington, DC 20554

Adam Krinsky, Esq.  
Legal Advisor  
Office of Commissioner Tristani  
445 12th Street, S.W., 8-C302  
Washington, DC 20554

Thomas J. Sugrue, Esq.  
Chief, Wireless Telecommunications Bureau  
445 12<sup>th</sup> Street, SW, Room 3-C252  
Washington, DC 20554

Kathleen Ham, Esq.  
Deputy Chief, Wireless Telecommunications Bureau  
445 12<sup>th</sup> Street, SW, Room 3-C255  
Washington, DC 20554

D'wana R. Terry, Esq.  
Chief, Public Safety & Private Wireless Division  
Wireless Telecommunications Bureau  
445 12<sup>th</sup> Street, SW, Room 4-C321  
Washington, DC 20554

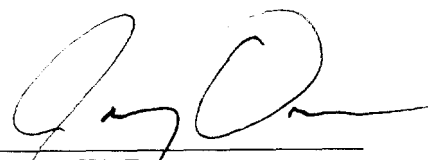
Ramona E. Melson, Esq.  
Deputy Chief, Public Safety & Private Wireless Division  
Wireless Telecommunications Bureau  
445 12<sup>th</sup> Street, SW, Room 4-C237  
Washington, DC 20554

Mr. Herbert W. Zeiler  
Deputy Chief, Public Safety & Private Wireless Division  
Wireless Telecommunications Bureau  
445 12<sup>th</sup> Street, SW, Room 4-C343  
Washington, DC 20554

Leora Hochstein  
Auctions and Industry Analysis Division  
Wireless Telecommunications Bureau  
445 12<sup>th</sup> Street, SW, Room #4-A633  
Washington, DC 20554

Scot Stone  
Public Safety and Private Wireless Division  
Wireless Telecommunications Bureau  
445 12<sup>th</sup> Street, SW, Room #4-B408  
Washington, DC 20554

Office of the Secretary  
445 12<sup>th</sup> Street, SW, Room TW-325  
Washington, DC 20554

  
\_\_\_\_\_  
Jeremy W. Denton